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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/902,515	07/09/2001	Roger Collins	05545P002	7416
7590 Thomas C. Webster BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP Seventh Floor 12400 Wilshire Boulevard Los Angeles, CA 90025-1026			EXAMINER CHEN, WENPENG	
			ART UNIT 2624	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/902,515

Applicant(s)

COLLINS, ROGER

Examiner

Wenpeng Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 30-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 10/30/2006 has been entered.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 36-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for the following reasons.

There are insufficient antecedent bases for the following limitations.

-- Claim 36 recites the limitation "the address book" in the last line.

***Claim Rejections - 35 USC § 102***

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 30, 43, and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Carr (US patent 5,293,379 cited previously.)

Carr teaches a method comprising:

-- for Claim 30, receiving data an interface from a service; (column 4, lines 33-51)

-- for Claim 30, identifying at the interface whether the data is an electronic mail (email) message or address book data; (column 6, line 64 to column 7, line 46; Figs. 4-6; The data are identified to include address information which are address book data in the collected header field and user data which are email message.)

-- for Claim 30, applying a first set of code words to encode data in the email message; (column 6, line 64 to column 7, line 46; Figs. 5-6; The user data are coded with a user data dictionary that has a first set of code words.)

-- for Claim 30, applying a second set of code words to encode the address book data. (column 6, line 64 to column 7, line 46; Figs. 5-6; The header fields including the address book data is coded with header dictionary that has a second set of code words.)

Carr teaches a system comprising:

-- for Claim 43, a service to provide messaging and groupware services; (column 4, lines 33-51)

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-- for Claim 43, an interface, coupled to receive message data from the service, including a compression module to identify whether the message data is an electronic mail (email) message or address book data, apply a first set of code words to encode data in the email message and apply a second set of code words to encode the address book data; (column 6, line 64 to column 7, line 46; Figs. 4-6; See explanation above with regard to Claim 30.)

-- for Claim 46, wherein the interface further comprises a cache to store the message data. (column 4, lines 33-40; the RAM)

### *Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carr as applied to Claim 30, and further in view of Unger et al. (US patent 5,991,713 cited previously.)

Carr teaches the parental Claim 30. Carr further teaches that other string compression algorithms are also applicable in the method explained with Figs. 3-9, namely compressing header and data with different dictionaries. However, Carr does not teach explicitly that the code words are based on the frequency associated to the above claims.

Unger teaches a method for compressing a message. In the method, different types of data are coded with different dictionaries. (column 8, line 62 to column 9, line 14) The method comprises:

-- generating for each dictionary a set of code words based on the frequency with which character strings represented by the code words are found within the type of data, wherein character strings which are relatively more common within the type of data are represented by relatively shorter code words in the set of code words; (column 1, lines 39-46; column 2, lines 23-54; column 9, lines 39-54; Each data of a language and subject is associated with a dictionary. Shorter token is assigned to a word of high frequency.)

-- initially performing a statistical analysis of character strings found in the type of data to determine a frequency of occurrence of each of the character strings; (To establish a dictionary based on frequency requires performing a statistical analysis of character strings in that type of data.)

-- wherein one of the techniques comprises identifying strings in the first or second fields based on a location of the strings in a spell-check dictionary. (column 8, line 61 to column 9, line 54; column 11, lines 6-18; Figs. 8-9; step 210 of Fig. 8; A dictionary of common English words is a spell check dictionary. The numbers (or tokens) are the locations.)

It is desirable to compress efficiently a text message. It is known in the art that Unger's dictionary can achieve a high degree of compression for each specific dictionary associated with a special language or subject. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to replace Carr's dictionaries with dictionaries developed with Unger's

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teaching for each of the header data and user data because this replacement improves compression efficiency. The combination thus teaches:

- generating the first set of code words based on the frequency with which character strings represented by the code words are found within the email message;

- generating the second set of code words based on the frequency with which character strings represented by the code words are found within the address book;

- wherein character strings which are relatively more common within the email message are represented by relatively shorter code words in the first set of code words and character strings which are relatively more common within the address book are represented by relatively shorter code words in said second set of code words.

8. Claims 30-32, 38-40, and 43-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer (US 6,842,768) in view of Carr (US patent 5,293,379 cited previously.)

With regard to Claims 31-32, Shaffer teaches a method comprising:

- receiving data an interface from a service; (Fig. 1,2; column 3, lines 16-43; column 4, lines 12-26)

- identifying at the interface the type of data and adaptively using its corresponding compression algorithm for compression; (column 7, line 45 to column 8, line 59; column 9, lines 45-60; For example, image, audio, and text data are compressed with different algorithms.)

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-- applying a first type of compression algorithm to encode data in the first type of data; (column 7, line 45 to column 8, line 59; column 9, lines 45-60; For example, image, audio, and text data are compressed with different algorithms.)

-- applying a second type of compression algorithm to encode data in the second type of data; (column 7, line 45 to column 8, line 59; column 9, lines 45-60; For example, image, audio, and text data are compressed with different algorithms.)

-- transmitting the encoded data in the first type from the interface to a wireless processing device. (Fig. 1; column 3, lines 16-43)

However, Shaffer does not teach that the first type of data is data in the email message and that the second type of data is the address book data.

Carr teaches a method comprising:

-- receiving data an interface from a service; (column 4, lines 33-51)

-- identifying at the interface whether the data is an electronic mail (email) message or address book data; (column 6, line 64 to column 7, line 46; Figs. 4-6; The data are identified to include address information which are address book data in the collected header field and user data which are email message.)

-- applying a first set of code words to encode data in the email message; (column 6, line 64 to column 7, line 46; Figs. 5-6; The user data are coded with a user data dictionary that has a first set of code words.)

-- applying a second set of code words to encode the address book data. (column 6, line 64 to column 7, line 46; Figs. 5-6; The header fields including the address book data is coded with header dictionary that has a second set of code words.)



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It is desirable to compress efficiently a text message. It is known in the art that Carr's approach can further improve compression rate of a document. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use Carr's compression method to compress emails in Shaffer's system and method because this modification improves compression efficiency.

Because Claim 31 is a dependent claim of Claim 30, the combination of Shaffer and Carr also teaches Claim 30.

When one compares Claims 38-40 with Claims 30-31, it is obvious that the above discussion also shows that the combination of Shaffer and Carr also teaches Claims 38-40.

Because both Shaffer and Carr teach systems (Shaffer: Figs. 1, 4, and 5; Carr: Fig. 1) for implementing the above discussed method, the combination of Shaffer and Carr as discussed above also teaches Claims 43-45 and 48-50.

For Claims 46-47 and 51, Shaffer further teaches:

-- wherein the interface further comprises a cache to store the message data; (Figs. 1, 4, and 5; The server has a memory to store message data.)

-- a first queue to store message data to be transmitted to the wireless device; (Figs. 1, 4, and 5; The server has a memory to store message data to be transmitted to the wireless device. The memory is a first queue.)

-- a second queue to store message data received from the wireless device. (Figs. 1, 4, and 5; The server also has a memory to store message data received from the wireless device. The memory is a second queue.)

The combination of Shaffer and Carr thus also teaches Claims 46-47 and 51.

9. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shaffer and Carr as applied to Claim 38, and further in view of Unger et al. (US patent 5,991,713 cited previously.)

The combination of Shaffer and Carr teaches the parental Claim 38. Car further teaches that other string compression algorithms are also applicable in the method explained with Figs. 3-9, namely compressing header and data with different dictionaries. However, the combination does not teach explicitly that the code words are based on the frequency associated to the above claims.

Unger teaches a method for compressing a message. In the method, different types of data are coded with different dictionaries. (column 8, line 62 to column 9, line14) The method comprises:

- generating for each dictionary a set of code words based on the frequency with which character strings represented by the code words are found within the type of data, wherein character strings which are relatively more common within the type of data are represented by relatively shorter code words in the set of code words; (column 1, lines 39-46; column 2, lines 23-54; column 9, lines 39-54; Each data of a language and subject is associated with a dictionary. Shorter token is assigned to a word of high frequency.)

- initially performing a statistical analysis of character strings found in the type of data to determine a frequency of occurrence of each of the character strings; (To establish a dictionary based on frequency requires performing a statistical analysis of character strings in that type of data.)

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-- wherein one of the techniques comprises identifying strings in the first or second fields based on a location of the strings in a spell-check dictionary. (column 8, line 61 to column 9, line 54; column 11, lines 6-18; Figs. 8-9; step 210 of Fig. 8; A dictionary of common English words is a spell check dictionary. The numbers (or tokens) are the locations.)

It is desirable to compress efficiently a text message. It is known in the art that Unger's dictionary can achieve a high degree of compression for each specific dictionary associated with a special language or subject. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to replace Carr's dictionaries with dictionaries developed with Unger's teaching for each of the header data and user data because this replacement improves compression efficiency. The overall combination thus teaches:

-- generating the first set of code words based on the frequency with which character strings represented by the code words are found within the email message;

-- generating the second set of code words based on the frequency with which character strings represented by the code words are found within the address book.

10. Claims 30, 33-35, 38, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer (US 6,842,768) in view of Lindquist et al. (US 6,687,362) and Carr (US patent 5,293,379 cited previously)

With regard to Claims 33-35, Shaffer teaches a method comprising:

-- receiving data an interface from a service; (Fig. 1,2; column 3, lines 16-43; column 4, lines 12-26)

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-- identifying at the interface the type of data and adaptively using its corresponding compression algorithm for compression; (column 7, line 45 to column 8, line 59; column 9, lines 45-60; For example, image, audio, and text data are compressed with different algorithms.)

-- applying a first type of compression algorithm to encode data in the first type of data; (column 7, line 45 to column 8, line 59; column 9, lines 45-60; For example, image, audio, and text data are compressed with different algorithms.)

-- applying a second type of compression algorithm to encode data in the second type of data; (column 7, line 45 to column 8, line 59; column 9, lines 45-60; For example, image, audio, and text data are compressed with different algorithms.)

-- transmitting the encoded data in the first type from the interface to a wireless processing device. (Fig. 1; column 3, lines 16-43)

However, Shaffer does not teach that (1) the first type of data is data in the email message, (2) the second type of data is the address book data, and (3) the header and the remainder part of an email message are coded differently.

Lindquist teaches a method to send address books to various users including internet users, wherein the address data are used in a header field of an email for sending the email. (Fig. 1; column 3, lines 19-56)

Carr teaches a method comprising a step of using different code words for separately compressing header information and user data. (column 6, line 64 to column 7, line 46; Figs. 4-6)

It is desirable to sending address book data to maintain accuracy and completeness of address book. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to apply Lindquist's teaching to send regular data and address book

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data in Shaffer's system. It is also desirable to compress data efficiently as pointed out by Shaffer. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to apply Carr's teaching (1) to apply a first set of code words to encode data in the email message and (2) to apply a second set of code words to encode the address book data in Shaffer's system because the overall combination improves not only accuracy of address book but also compression efficiency.

Carr further teaches a method comprising:

- identifying a header field within the email message; (column 6, line 64 to column 7, line 46; Figs. 4-6; The data list in Fig. 5 other than data are in a header field.)

- applying the first set of code words to encode data in said header field; (column 6, line 64 to column 7, line 46; Figs. 5-6; The set of static, semi-static and dynamic fields collected header fields that represents a collected first field is coded with header dictionary that has a first set of code words.)

- applying a third set of code words to encode data in the remainder of the email message. (column 6, line 64 to column 7, line 46; Figs. 5-6; The user data that represent a second field are coded with a user data dictionary that has a second set of code words.)

It is desirable to further compress data. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to apply Carr's teaching to separately compressing header data and user data in an email message in the above combined system because the overall combination further improves compression efficiency.

Because Claim 33 is a dependent claim of Claim 30, the above combination teaches Claim 30.

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When one compares Claims 38 and 41 with Claims 30 and 33-35, it is obvious that the combination also teaches Claims 38 and 41 as discussed above.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wenpeng Chen whose telephone number is 571-272-7431. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 571-273-8300 for After Final communications. TC 2600's customer service number is 571-272-2600.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

Wenpeng Chen  
Primary Examiner  
Art Unit 2624

January 22, 2007

